

REMARKS

Claims 1-11 are pending. By this Amendment, claims 1 and 6-8 are amended to clarify the features recited. Claims 10 and 11 are added. Support for the amendments and added claims can be found in Applicants' specification, for example, at page 6, lines 25-page 7, line 16; page 8, lines 29-35 and page 9, lines 10 and 11. Thus, no new matter is added by the amendments. Reconsideration of the application based on the above amendments and following remarks is respectfully requested.

Claims 1-9 are rejected under 35 U.S.C. §103(a) over Allen (U.S. Patent Application Publication No. 2004/0121792) in view of Chen (U.S. Patent No. 7,283,466) further in view of Kennedy (U.S. Patent No. 6,754,192) further in view of Upton (U.S. Patent Application Publication No. 2003/0093403). The rejection is respectfully traversed.

Allen in view of Chen, Kennedy and Upton would not have rendered obvious at least the extracting and forwarding recited in claims 1 and 6-8. In rejecting Applicants' claims, the Office Action relies on Chen as allegedly disclosing the above-quoted features. The Office Action's analysis fails for at least the following reasons.

Chen is directed at detecting and monitoring changes in physical routes with an optical switch network. See Abstract. As shown in Fig. 1, from a network architecture point of view, Chen discloses an application layer comprising applications 102 and 104, a node layer grouping of various network switches TXN, and a bridge layer disposed therebetween. Chen discloses notifications of change in service, for example, when a physical route of the service changes, are provided to the application layer from the bridge layer when the bridge layer deduce these notifications from events received from the network switches. At the bridge layer level, an event monitor 120 receives event messages from network nodes such as SNC connection events. See col. 3, lines 16-17, col. 4, lines 31-32, col. 5, lines 26-28 and lines 51-56. These events may be SNC attribute change events revealing a modification of a

logical path, e.g., a list of nodes that logically connect to the two end points of the SNC. See col. 5, lines 5-20.

In rejecting Applicants' claims, the Office Action relies on Chen as allegedly disclosing the forwarding feature recited in claims 1 and 6-8. The Office Action's reliance is misplaced for at least the following reasons.

Claim 1 recites that the forwarding is "performed on said one node of the ad-hoc network." Chen explicitly states "the event monitor 120 receives event messages from the nodes," "a connection event is received by a bridge layer from a switch in the optical switching network" and "the connection event is from the originated node." See col. 3, lines 16-17, col. 5, lines 26-28 and lines 33-35. That is, Chen clearly teaches that the bridge layer receives the connection events from the set of network nodes that are separate from the bridge. In other words, that means that the forwarding of the extracted information is not performed within the same node as the node in which the registering and the extracting are performed.

The Office Action also relies on Chen as allegedly disclosing the extracting as recited in claims 1 and 6-8. The Office Action's analysis fails for at least the following reasons.

Claim 1 specifically recites "extracting at the one node" and "forwarding said routing information extracted." In contrast, Chen discloses based on the extracted connection events that make it possible to detect or change in a logical path, a new physical route for the connection is calculated which is then transmitted to an application of the application layer. In Chen, the extracted information is thus processed and the results are sent to the applications. In other words, the extracted information is not forwarded as such to the applications.

Further, claim 1 recites "extracting at the one node, routing information corresponding to the indicated type of information from routing information exchanged by routing applications of nodes of the ad-hoc network on a transport or network layer"

The Office Action appears to consider the SNC connection events of Chen to correspond to the above-quoted feature. The Office Action's analysis fails for at least the following reasons.

Chen does not state that the SNC events are from a network or transport layer. Specifically, it is not clear from Chen as to whether or not the disclosed "node layer" to which the TXN switches belong is a network or transport layer. This is mainly because the "Ciena Core Director" switches discussed in Chen are Ethernet switches, i.e., switches operating at a data link layer level, and not at a transport or network layer level.

The Office Action acknowledges that Allen fails to disclose forwarding a routing information extracted by a notification means to an application, so that the application can exploit the routing information. The Office Action relies on Chen to overcome the deficiencies of Allen.

The Office Action asserts that it would have been obvious to one of ordinary skill in the art for forwarding the routing information extracted by the notification means to the application layer of Allen by implementing the disclosure of Chen, which discloses a notification that physical routes of affected connections have changed is transmitted by the bridge layer to an application in the application layer. The alleged motivation asserted by the Office Action to combine Chen with Allen is that it is desirable for the application of the application layer to receive notification of change in a service, for example, when a physical route of the service changes. Applicants respectfully disagree.

Allen discloses a multi-routing protocol network and methods of operating wireless devices in the network that allow the network to be switched from one routing protocol to

another (Allen, Abstract). An application layer 314 is coupled to the network layer 306. The application layer 314 comprises a plurality of application programs, including a first application program 316, a second application program 318 and a third application program 320. Each application program routes messages through a network to which a wireless device 102 is connected. Each application has a particular network routing protocol that works best, determined from trial and error or simulation (Allen, paragraph [0026]).

In an ad-hoc network as disclosed in Allen, for example, each node contributes to the routing of the data by acting as a router (or switch) in addition to its applicative functionalities. This is because an ad-hoc network does not rely on preexisting infrastructure. Having the same node handling switch issues and applicative issues can be achieved in an ad-hoc network. This is because the mere nature of an ad-hoc network allows each node contribute to the routing/switching of data over the network, while the same node is an applicative node, (having applications in the application layer).

As discussed above, Chen discloses a method and system for tracking physical route changes in an optical switching network. Chen illustrates, in Fig. 1, a network architecture comprising an application layer having applications 102 and 104, a node layer grouping of various network switches TXN, and a bridge layer disposed therebetween.

The optical switching network, as disclosed in Chen, relies on an existing infrastructure comprising TXN switches for routing of information. That is, the routing of information is a separate structure from the application layer. The mere nature of a optical switching network has switches that switch data at a low level of the network, while the node having applications of a high level (application level) are nodes that are distinct from the switches.

However, the claim features relate to an ad-hoc network. An ad-hoc network has specifications that do not exist in an optical network, such as the optical switching network of

Chen. That is, Chen fails to disclose performing all the claim steps within the same node.

Therefore, it is not reasonable to conclude that one of ordinary skill in the art would have predictably modified the ad-hoc network of Allen with the optical switching network features of Chen to result in the claim features. For at least these reasons, the combination of applied references fails to disclose all the features positively recited in independent claims 1 and 6-8.

Allen, Kennedy and Upton fail to overcome the deficiencies of Chen explained above regarding claims 1 and 6-8. Accordingly, the Office Action would not have rendered obvious the combination of features recited in claims 2-5 and 9 for at least the dependence of these claims on claim 1 and for the separately patentable features that these claims recite.

Withdrawal of the rejection is respectfully requested.

Added claims 10 and 11 are patentable over the applied references for at least the dependence of these claims on claim 1 and for the separately patentable features that these claims recite.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-11 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



William P. Berridge
Registration No. 30,024

Jomy J. Methipara
Registration No. 67,248

WPB:JXM/ysg

Attachment:
Petition for Extension of Time

Date: March 18, 2011

OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

**DEPOSIT ACCOUNT USE
AUTHORIZATION**

Please grant any extension
necessary for entry of this filing;
Charge any fee due to our
Deposit Account No. 15-0461